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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,462	11/07/2003	Sang Kyun Lee	1630-0833PUS1	8284

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EXAMINER	
CHEEMA, UMAR	
ART UNIT	PAPER NUMBER
2444	

NOTIFICATION DATE	DELIVERY MODE
02/24/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/702,462	LEE ET AL.	
	Examiner	Art Unit	
	UMAR CHEEMA	2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *12,14,15 and 17* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *12,14,15 and 17* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/26/2011 has been entered.

Response to Amendment

2. This communication is in response to the Request for Continued Examination transmitted on 09/26/2011.

3. Claims 12, 14, 15 and 17 are pending.

4. Claims 12 and 15 are independent claims and are being further amended.

5. Claims 13 and 16 have been cancelled.

Response to Arguments

6. Applicant's arguments and amendments filed on 26 September 2011 have been carefully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., *by amending independent claims 12 and 15 to add the new limitations of "manage network state information for managing and controlling the plurality of network devices included in the network . . . the network state information to the new device*

such that the new device operates as the management device for subsequent network management", has changes the scope of independent claims 12 and 15, and will require further search and consideration) to the claims which significantly affected the scope thereof.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 12, 14, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joon-Bo et al. (hereinafter referred to Joon-Bo) (US Pub. No. 2002/0055978 A1) in view of Barber et al. (hereinafter referred to Barber) (US Patent No. 6,865,596 B1).

8. As to claims 1-11, (Canceled).

9. As to claim12, Joon-Bo teaches a network system, comprising:

a plurality of network devices connected to a network (***see at least Figures 1 and 2, ¶ (0005); designating a master and slaves in a network in which a plurality of Bluetooth equipped devices are linked together***) and a managing device (***see at least ¶¶ (0005, 0007), a network manager 160 of the Bluetooth equipped device, to which power is applied, serves as the master mode based on the responded inquiry***) configured to: manage network state

information for managing and controlling the plurality of network devices included in the network (***see at least ¶¶ (0042, 0043, 0045), a network manager 160 in a network master device serves to manage and control network devices and wherein network master receives connection information from the network slaves in order to check the connection status with each of the network slaves in the network; Please note that description of Figures 1-2 in § Description of the Related Art: explains in details the information required to be obtained (i.e. address or names of slaves, or linking information etc.) and stored on the master or new by the network manager in order for a backup slave device to become master***);

detect whether a new device is entered into the network (***see ¶¶ (0048, 0049), Figure 6, wherein detecting and choosing new master device which then stores information (i.e. network state information) on the newly entering slave and announces information on the other slaves as well as its own information, to the new slave etc.***);

identify a capability of the new device (***see at least ¶¶ (0048, 0049), Figure 6, wherein when the absence of the network master 400 in the network operating region is identified, each of the slaves checks for backup master rank information, which is used to choose a new network master (S412)***);

determine, based on the identified capability of the new device, whether the new device can be a management device managing the network and the plurality of network devices (***see at least ¶¶ (0048, 0049), Figure 6, wherein in step S412, each of the network slaves 300 checks for whether its rank is given the highest priority in order to be chosen as a new network master and if so corresponding slave changes its role to a new master (S415) and then the new master stores information necessary to operate as a new master device etc.***); and

transmit, if the new device is determined as the management device, the network state information to the new device such that the new device operates as the management device for subsequent network management (***see at least ¶¶ (0045, 0048, 0049), Figure 6, wherein in step S412, after determining whether the slave device is ranked higher to become new master device and if so corresponding slave changes its role to a new master (S415) and then transmitting information for the new master to be stored that is necessary to operate as a new master device etc.***).

10. Although Joon-Boo teaches the substantial features of the applicant's claimed invention, Joon-Bo fails to explicitly teach wherein the network state information includes unique information uniquely assigned to devices included in the network for identifying each device in the network and the unique information is assigned by the managing device.

11. In analogous teaching, Barber exemplifies this wherein Barber teaches this wherein the network state information includes unique information uniquely assigned to devices included in the network for identifying each device in the network and the unique information is assigned by the managing device (***see at least col. 2, lines 42-60, Figure 1, wherein each CAN (Control area network system) includes a master controller 28 a system identifier 27 that is used to uniquely identify each CAN system in a particular control area network; col. 3, lines 15-29, explains wherein Each device 33 has a device number 32 used to uniquely identify each device 33 in a particular CAN system (such as 21, 23 and 26) etc.***).

12. Thus, given the teaching of Barber, it would have been obvious to a person of ordinary skill person in the art of networking to combine the teaching of Barber into Joon-Bo for a network manager to assign unique information uniquely assigned to network devices for

identifying each device. One of ordinary skilled in the art would have been motivated because it would have helped device manager to manage and maintain information about each device coupled to master controller (***see Barber: at least col. 4, lines 42-46***).

13. As to claim 13, (Canceled).

14. As to claim14, Joon-Bo teaches the network system according to claim 12, wherein when the new device is connected to the network, the new device transmits an address of the new device to the managing device (***see at least ¶¶ (0045, 0048, 0049), Figure 6, wherein the new master stores information on the newly entering slave and announces information on the other slaves as well as its own information, to the new slave. In addition, the new master also stores information on other new slaves that enter the network operating region or the slaves that leave the network operating region, such as the addresses or names of the slaves, etc., and announces the stored information to the other slaves (S460) etc.***).

15. As to claim15, Joon-Bo teaches a method for configuring a network including a plurality of network devices (***see at least Figures 1 and 2, ¶ (0005); designating a master and slaves in a network in which a plurality of Bluetooth equipped devices are linked together***) and a managing device managing the plurality of network devices (***see at least ¶¶ (0005, 0007), a network manager 160 of the Bluetooth equipped device, to which power is applied, serves as the master mode based on the responded inquiry***), the method comprising: managing, by the managing device, network state information for managing and controlling the plurality of

network devices included in the network (***see at least ¶¶ (0042, 0043, 0045), a network manager 160 in a network master device serves to manage and control network devices and wherein network master receives connection information from the network slaves in order to check the connection status with each of the network slaves in the network; Please note that description of Figures 1-2 in § Description of the Related Art: explains in details the information required to be obtained (i.e. address or names of slaves, or linking information etc.) and stored on the master or new by the network manager in order for a backup slave device to become master***);

detecting, by the managing device, whether a new device is entered into the network (***see ¶¶ (0048, 0049), Figure 6, wherein detecting and choosing new master device which then stores information (i.e. network state information) on the newly entering slave and announces information on the other slaves as well as its own information, to the new slave etc.***);

identifying, by the managing device, a capability of the new device (***see at least ¶¶ (0048, 0049), Figure 6, wherein when the absence of the network master 400 in the network operating region is identified, each of the slaves checks for backup master rank information, which is used to choose a new network master (S412)***); determining, by the managing device, whether the new device can be a management device managing the network and the plurality of network devices based on the identified capability of the new device (***see at least ¶¶ (0048, 0049), Figure 6, wherein in step S412, each of the network slaves 300 checks for whether its rank is given the highest priority in order to be chosen as a new network master and if so corresponding slave changes its role to a new master (S415) and then the new master stores information necessary to operate as a new master device etc.***); and transmitting, by the managing device, the network state information to the new device such that the new device operates as the

management device for subsequent network management, if the new device is determined as the management device (***see at least ¶¶ (0045, 0048, 0049), Figure 6, wherein in step S412, after determining whether the slave device is ranked higher to become new master device and if so corresponding slave changes its role to a new master (S415) and then transmitting information for the new master to be stored that is necessary to operate as a new master device etc.***).

16. Although Joon-Boo teaches the substantial features of the applicant's claimed invention, Joon-Bo fails to explicitly teach wherein the network state information includes unique information uniquely assigned to devices included in the network for identifying each devices in the network, and the unique information is assigned by the managing device.

17. In analogous teaching, Barber exemplifies this wherein Barber teaches this wherein the network state information includes unique information uniquely assigned to devices included in the network for identifying each devices in the network, and the unique information is assigned by the managing device (***see at least col. 2, lines 42-60, Figure 1, wherein each CAN (Control area network system) includes a master controller 28 a system identifier 27 that is used to uniquely identify each CAN system in a particular control area network; col. 3, lines 15-29, explains wherein Each device 33 has a device number 32 used to uniquely identify each device 33 in a particular CAN system (such as 21, 23 and 26) etc.***).

18. Thus, given the teaching of Barber, it would have been obvious to a person of ordinary skill person in the art of networking to combine the teaching of Barber into Joon-Bo for a network manager to assign unique information uniquely assigned to network devices for identifying each device. One of ordinary skilled in the art would have been motivated because it

would have helped device manager to manage and maintain information about each device coupled to master controller (***see Barber: at least col. 4, lines 42-46***).

19. As to claim 16, (Canceled).

20. As to claim17, Barnard discloses the method according to claim 15, further comprising: transmitting, by the new device, an address of the new device to the managing device (***see at least ¶¶ (0045, 0048, 0049), Figure 6, wherein the new master stores information on the newly entering slave and announces information on the other slaves as well as its own information, to the new slave. In addition, the new master also stores information on other new slaves that enter the network operating region or the slaves that leave the network operating region, such as the addresses or names of the slaves, etc., and announces the stored information to the other slaves (S460) etc.***).

Prior Arts of the Record

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the form PTO-892 (Notice of Cited References) for a list of more relevant prior arts.

Conclusion

22. Examiner has cited particular paragraphs, figures, columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the

specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Umar Cheema/
Examiner, Art Unit 2444